

EM200™

Mobile Radio User Guide

CONTENTS

COMPUTER SOFTWARE COPYRIGHTS

SAFETY AND WARRANTY

PRODUCT SAFETY AND RF EXPOSURE COMPLIANCE



Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet enclosed with your radio.

ATTENTION!

This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements. Before using this product, read the RF energy awareness information and operating instructions in the Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 68P81095C99) to ensure compliance with RF energy exposure limits.

For a list of Motorola-approved antennas, batteries, and other accessories, visit the following web site which lists approved accessories: http://www.motorola.com/cgiss/index.shtml.

LIMITED WARRANTY

MOTOROLA COMMUNICATION PRODUCTS

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

MOTOROLA INC. (“MOTOROLA”) warrants the MOTOROLA manufactured Communication Products listed below (“Product”) against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

EM200 Mobile Units	Two (2) Years
Product Accessories	One (1) Year

Motorola, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. GENERAL PROVISIONS:

This warranty sets forth the full extent of MOTOROLA's responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at MOTOROLA's option, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

III. STATE LAW RIGHTS:

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSIONS MAY NOT APPLY.

This warranty gives specific legal rights, and there may be other rights which may vary from state to state.

IV. HOW TO GET WARRANTY SERVICE:

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by Motorola through one of its authorized warranty service locations. If you first contact the company which sold you the Product (e.g., dealer or communication service provider), it can facilitate your obtaining warranty service.

V. WHAT THIS WARRANTY DOES NOT COVER:

A Defects or damage resulting from use of the Product in other than its normal and customary manner.

B Defects or damage from misuse, accident, water, or neglect.

C Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.

D Breakage or damage to antennas unless caused directly by defects in material workmanship.

E A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the addition to the Product of non-Motorola supplied equipment) which adversely affect performance of the Product or interfere with Motorola's normal warranty inspection and testing of the Product to verify any warranty claim.

F Product which has had the serial number removed or made illegible.

G Freight costs to the repair depot.

H A Product which, due to illegal or unauthorized alteration of the software/ firmware in the Product, does not function in accordance with MOTOROLA's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.

I Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.

J Normal and customary wear and tear.

VI. PATENT AND SOFTWARE PROVISIONS:

MOTOROLA will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a United States patent, and MOTOROLA will pay those costs and damages finally awarded against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

A that MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim;

B that MOTOROLA will have sole control of the defense of such suit and all negotiations for

its settlement or compromise; and

C should the Product or parts become, or in MOTOROLA's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes non-infringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

MOTOROLA will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder with software, apparatus or devices not furnished by MOTOROLA, nor will MOTOROLA have any liability for the use of ancillary equipment or software not furnished by MOTOROLA which is attached to or used in connection with the Product. The foregoing states the entire liability of MOTOROLA with respect to infringement of patents by the Product or any parts thereof.

Laws in the United States and other countries preserve for MOTOROLA certain exclusive rights for copyrighted MOTOROLA software such as the exclusive rights to reproduce in copies and distribute copies of such Motorola software. MOTOROLA software may be used in only the Product in which the software was originally embodied and such software in such Product may not be replaced, copied, distributed, modified in any way, or used to produce any derivative thereof. No other use including, without limitation, alteration, modification, reproduction, distribution, or reverse engineering of such MOTOROLA software or exercise of rights in such MOTOROLA software is permitted. No license is granted by implication, estoppel or otherwise under MOTOROLA patent rights or copyrights.

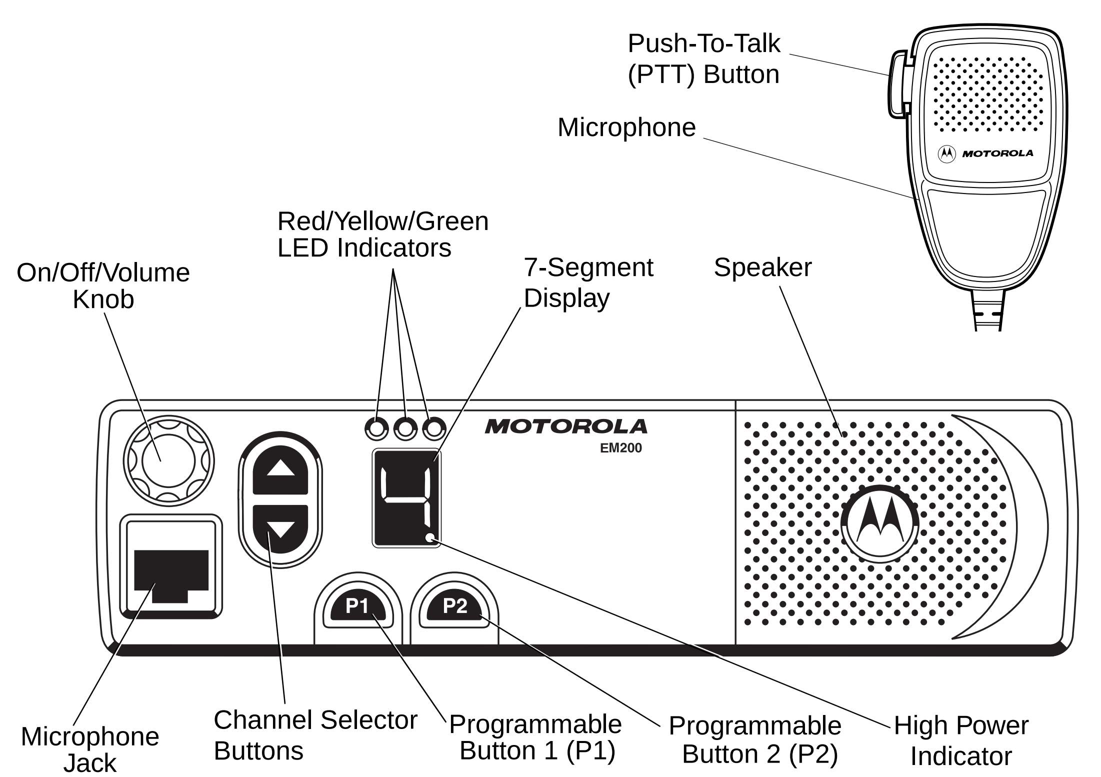
VII.GOVERNING LAW:

This Warranty is governed by the laws of the State of Illinois, USA.

Notes:

RADIO OVERVIEW

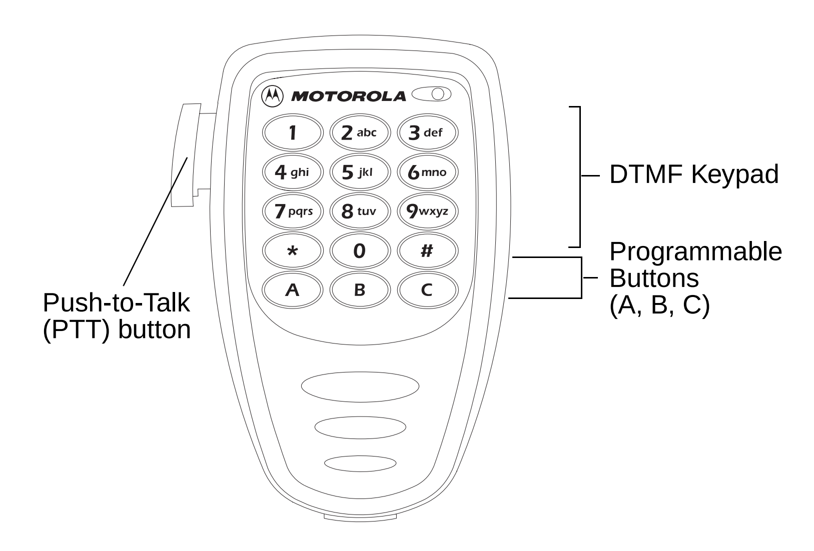
PARTS OF THE RADIO



Optional Enhanced Keypad Microphone (RMN5029)

Your radio may be ordered with an optional DTMF (Dual-Tone Multi-Frequency) microphone that has a direct entry keypad.

This keypad microphone has three programmable buttons (A, B, C) below the keypad that can be programmed to conveniently activate select radio features also available for the programmable (P1) and (P2) buttons.



RADIO OVERVIEW

On/Off/Volume Knob

Turns the radio on or off, and adjusts the radio's volume.

Seven Segment Display

The seven segment display indicates what channel is active and the power level.

Channel Selector Buttons



Used for channel selection. Pressing a channel selector button causes its associated channel indicator to light.

Each press of the ▲ button increments the channel. Each press of the ▼ button decrements the channel.

LED Indicators

Indicates power up, transmit, receive, scan, monitor status, busy, power, Call Alert™ receive, and Selective Call receive.

Basic Features

LED State/Color	Indication
Radio Call	
Red	Transmitting
Flashing Red	Receiving
Flashing Red	Channel Busy
Scan	
Flashing Green	Scanning for activity
Call Alert	
Flashing Yellow	Indicates receiving a Call Alert
Selective Call	
Flashing Yellow	Indicates receiving a Selective Call
Sticky Monitor/Open Squelch	
Yellow	While monitoring
High/Low Power	
Dot on Display	Indicates High Power
Dot Not On Display	Indicates Low Power

Programmable Buttons

Your radio has two programmable buttons. Your dealer can program these buttons as shortcuts to various radio features.

Check with your dealer for a complete list of functions your radio supports.

Programmable buttons include the (P1) and (P2) buttons (see page 9).

Some buttons can access up to two features, depending on the type of button press:

- short press—quickly pressing and releasing the programmable buttons
- long press—pressing and holding the programmable buttons for a period of time (default 1 1/2 seconds or programmed value)
- hold down—pressing and holding down the programmable buttons while checking status or making adjustments

A summary of programmable radio features and corresponding page references appears beginning on page 13.

In the "Button" column, have your dealer record the name of the programmable button next to the feature that has been programmed to it.

The dealer can use the abbreviations (P1, P2) shown in the radio illustration on page 9.

Also, where appropriate, have your dealer indicate whether the button press requires a short press, a long press, or needs to be held down.

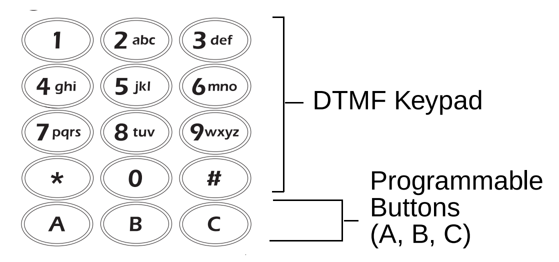
Push-to-Talk (PTT) Button

Press and hold down this button on the microphone to talk (transmit); release it to listen.

Microphone

Hold the microphone 1 to 2 inches (2.5 to 5 cm) from your mouth, and speak clearly into it.

Use with Enhanced Keypad Microphone (RMN5029)



These keys are used to:

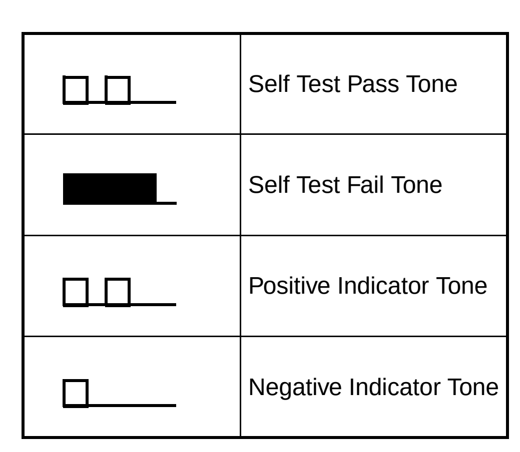
- Send DTMF tones (see page 21)
- Directly access preprogrammed features

Function	Short Press	Long Press	Hold Down	Page	Button
Volume Set	Sound a tone for adjusting your radio's volume level.†			15	
Sticky Monitor	Toggle silent monitor operation (also turn off open squelch monitor when it has been activated).	Turn on open squelch monitor.	—	16	
Repeater/ Talkaround	Toggle between using a repeater or transmitting directly to another radio.†		—	19	
Power Level	Toggle transmit power level between High and Low. An indication for high power is a dot on the display. The dot does not appear while in low power.†		—	19	
Voice Operated Transmission (VOX)	Toggle VOX on and off.†		—	17	
Squelch	Toggles your radio's squelch level between tight and normal squelch.		—	20	
Local/Distance	Toggle between local mode and distance mode.†		—	20	
Scan/Nuisance Channel Delete	Toggle scan on and off.	Delete a nuisance channel while scanning.	—	23	

† This function is activated by EITHER a short OR a long press, but not both.

INDICATOR TONES

High pitched tone □ Low pitched tone ■



Some programmable buttons use tones to indicate one of two modes:

Button	Positive Indicator Tone	Negative Indicator Tone
Scan	**Start** scan	**Stop** scan
Power Level	**High** power selected	**Low** power selected
Squelch	**Tight** Squelch	**Normal** Squelch
Repeater/ Talkaround	**Does not use** repeater	**Uses** repeater
VOX	VOX **enabled**	VOX **disabled**
Local/Distance	**Local** Mode	**Distance** Mode

IMPROVED AUDIO FEATURES

Companding

Companding is a feature that allows further improvement of voice quality. It compresses your voice at transmission, and expands it when receiving while simultaneously reducing extraneous noise. However, to enjoy this benefit, **all** transmitting and receiving radios must have this feature activated.

GETTING STARTED

TURNING THE RADIO ON OR OFF



ON	OFF
Rotate the **On/Off/ Volume Control** knob clockwise. If power-up is successful, you will hear the Self-Test Pass Tone ( ) and see the green LED indicator light momentarily. If the radio fails to power up, you will hear the Self Test Fail Tone ( ).	Rotate the **On/Off/ Volume Control** knob counterclockwise until you hear a click and both the display and LED indicators turn off.

ADJUSTING THE VOLUME

Turn the **On/Off/Volume Control** knob clockwise to increase the volume, or counterclockwise to decrease the volume.

–or–

Note: Your dealer can preprogram one of the programmable buttons to Volume Set.

1. Hold down the **Volume Set** button (see page 13). You will hear a continuous tone.
2. Turn the **On/Off/Volume Control** knob to the desired volume level.
3. Release the **Volume Set** button.

SELECTING A RADIO CHANNEL

Your radio offers four or eight channels.

Note: Due to government regulations, some channels may not be programmed. See your dealer for more information.

To Select a Channel

Press the ▲ button or ▼ button to select the desired channel.

SENDING A CALL

1 Turn your radio on.

2 Select the desired channel.

3 Hold the microphone vertically 1 to 2 inches (2.5 to 5 cm) from your mouth. Press the **PTT** button to talk; release it to listen.

RECEIVING A CALL

1 Turn your radio on.

2 Adjust the radio’s volume, if necessary (see page 15).

3 Select the desired channel.

4 To respond, hold the microphone vertically 1 to 2 inches (2.5 to 5 cm) from your mouth. Press the **PTT** button to talk; release it to listen.

MONITORING

It is important to monitor traffic before transmitting to ensure that you do not “talk over” someone who is already transmitting.

1 A short press of the preprogrammed **Monitor** button places the radio in Sticky Permanent Monitor mode.

- You hear a high-pitched tone.

A short press of the **Monitor** button cancels Sticky Permanent Monitor mode and returns the radio to normal operation.

3 To place the radio in open squelch mode, press and hold the preprogrammed **Monitor** button until you hear a high-pitched tone.

4 Momentarily press the **Monitor** button to return to normal operation.

VOX OPERATION

When hands-free operation is desired, your radio can transmit by voice alone using the VOX feature when you speak through a voice activated external microphone that is connected to your radio.

1 To enable or disable VOX operation, press the preprogrammed **VOX** button (see page 13).

Note: Pressing the **PTT** button disables VOX.

–or–

2 Select a channel that has been preprogrammed by your dealer to enable VOX.

Note: You do not need to press a preprogrammed **VOX** button.

Note: Pressing the **PTT** button disables VOX.

3 Select a channel that has not been preprogrammed by your dealer to disable VOX.

Notes:

RADIO CALLS

SELECTIVE RADIO INHIBIT

Your radio is equipped with a security feature that can temporarily render the unit inoperative when an inhibit signal is sent from the base station.

This feature is commonly used to disable radios:

- In case of theft
- When your vehicle is being serviced
- For system control reasons

Note: When your radio has been disabled by the base station, the seven segment display indicates 0 and all controls will be inoperative except for the **On/Off** button.

REPEATER OR TALKAROUND MODE

Talkaround Mode enables you to communicate with another radio when either:

- The repeater is not operating

–or–

- Your radio is out of the repeater's range but within communicating distance of another radio. An audible indicator is heard when changing between modes.

To select either Repeater Mode or Talkaround Mode:

Press the preprogrammed **Repeater/ Talkaround** button (see page 13) to toggle between Repeater Mode and Talkaround Mode.

SETTING THE POWER LEVEL

Each channel in your radio has a predefined transmit power level that can be changed.

- High power
- Low power

To set the power level, press the preprogrammed **Power Level** button (see page 13) to toggle between *low* and *high*. A dot appears on the display indicating high power.

SETTING TIGHT OR NORMAL SQUELCH

Use this feature to filter out nuisance (unwanted) calls and/or background noise. However, tightening squelch could cause calls from remote locations to be filtered out as well. In this case, normal squelch may be more desirable.

Press the preprogrammed **Squelch** button (see page 13) to toggle between tight and normal squelch.

RECEIVING A SELECTIVE CALL

When you receive a selective call:

- The yellow LED indicator flashes, if programmed by your dealer.
- You hear two high-pitched tones.

To answer the call, press the **PTT** button.

RECEIVING A CALL ALERT PAGE

When you receive a Call Alert page:

- The yellow LED indicator flashes, if programmed by your dealer.
- You hear four high-pitched tones.

To answer the page, press the **PTT** button; to cancel the page, press any other key.

SETTING LOCAL OR DISTANCE MODE

Use this feature between Local mode (low sensitivity) and Distance mode (normal sensitivity). When Local mode is set, you will not hear week transmissions. When Distance mode is set you will hear all transmissions, including weaker signals.

Press the preprogrammed **Local/Distance** button (see page 13) to toggle between Local and Distance mode.

SENDING DTMF TONES

Use with Enhanced Keypad Microphone (RMN5029)

Use this feature to send DTMF tones to a repeater.

1	Press and hold the microphone’s PTT button.
2	Press and release the required DTMF buttons.
3	Release the microphone’s PTT button.

Notes:

SCAN

You can monitor multiple channels and receive any calls that are transmitted on them. Channels can be programmed into a scan list by your dealer. Your radio automatically switches to a scan list channel when it detects activity on it.

STARTING OR STOPPING SCAN

The green LED indicator blinks during a scan operation and stops blinking when the radio switches to a channel.

You can start or stop a scan operation by:

1 To start or stop a scan operation, press the preprogrammed **Scan** button (see page 13).

–or–

2 Select a channel that has been preprogrammed by your dealer to start Auto Scan.

Note: You do not need to press a preprogrammed **Scan** button.

3 Select a channel that has not been preprogrammed by your dealer to stop Auto Scan.

TALKBACK

The Talkback feature allows you to respond to a transmission while scanning. If transmission is detected on a channel while scanning, the radio will stop on that channel for a preprogrammed period of time. During this “hangtime” you may respond by pressing the **PTT** button.

Notes: If transmission ceases or if the **PTT** button is not pressed for a preprogrammed duration, the radio continues to scan. The LED scan indicator stops blinking while the radio is in hangtime.

DELETING A NUISANCE CHANNEL

Note: Your dealer must have preprogrammed a button to **Nuisance Delete** to access this feature.

If a channel continually generates unwanted calls or noise (a “nuisance” channel), you can temporarily remove it from the scan list:

1	While the radio is on the Nuisance Channel, press the preprogrammed **Nuisance Channel Delete** button until you hear a tone.
2	Release the **Nuisance Channel Delete** button. The nuisance channel is deleted.

Note: You cannot delete a priority channel or last remaining channel in the scan list.

Restoring a Channel to the Scan List

1	Press the **Scan** button to stop the scan.
2	Press the **Scan** button again to start scanning again. The Deleted Nuisance Channel is restored to the scan list.

ACCESSORIES

Motorola offers a number of accessories to enhance the productivity of your two-way radio. Many of the available accessories are listed below.

AUDIO

HMN3596	Standard Microphone
HMN1035	Heavy Duty Microphone
RMN5029	Enhanced Keypad Microphone
RMN5018	Mag One Microphone (6 months warranty only)
REX4617	Telephone Style Handset Kit
GMMN4065	Visor Microphone (Omni-Direction)
RMN4027	Visor Microphone - High Noise (Uni-Direction)
RSN4001	External Speaker 13 W
HSN8145	External Speaker 7.5 W
HLN9073	Microphone Hang-up Clip (requires install)
HLN9414	Microphone Hang-up Clip (Universal - no install required)

ALARM AND ACCESSORIES

RLN4856	Footswitch with Remote PTT
RLN4857	Pushbutton with Remote PTT
RLN4858	Gooseneck PTT
RLN4836	External PTT with Emergency Footswitch
HLN9328	External Alarm Relay (used in conjuction with GLN7282)
GLN7282	Buzzer Kit (used in conjunction with HLN9328)

MOUNTING

GLN7324	Low Profile Mounting Bracket
GLN7317	High Profile Mounting Bracket
FTN6083	DIN Mount
HLN8097	Removable Slide Mount with Mini-U Connector
HLN9227	8 in. Gooseneck Trunnion
RLN4779	Keylock Mounting Bracket

ANTENNAS

HAD4006	VHF 136-144 MHz, 1/4 Wave Roof Mount
HAD4007	VHF 144-150.8 MHz, 1/4 Wave Roof Mount
HAD4008	VHF 150.8-162 MHz, 1/4 Wave Roof Mount
HAD4009	VHF 162-174 MHz, 1/4 Wave Roof Mount
RAD4000	VHF 136-174 MHz, 3 dB Gain (no mount)
HAD4014	VHF 140-174 MHz, 3.5 dB Gain Roof Mount
HAE4002	UHF 403-430 MHz, 1/4 Wave Roof Mount
HAE4003	UHF 450-470 MHz, 1/4 Wave Roof Mount
HAE4004	UHF 470-512 MHz, 3.5 dB Gain Roof Mount
HAE4010	UHF 406-420 MHz, 3.5 dB Gain Roof Mount
HAE4011	UHF 450-470 MHz, 3.5 dB Gain Roof Mount
HAE4012	UHF 470-494 MHz, 3.5 dB Gain Roof Mount
HAE4013	UHF 494-512 MHz, 3.5 dB Gain Roof Mount
RAE4004_RB	UHF 445-470 MHz, 5 dB Gain Roof Mount
RAE4004_MB	UHF 445-470 MHz, 5 dB Gain Magnetic Mount
TAE6053	UHF 430-450 MHz, 1/4 Wave Roof Mount

CONTROL STATION

HPN4002	Desktop Power Supply 1-25 W
HPN4001	Desktop Power Supply 25-60 W
HMN3000	Black Desk Microphone
RLN5390	Desktop Tray with Speaker
RLN5391	Desktop Tray without Speaker
RLN5392	Low Power Control Station Kit (1-25 W) (includes power supply, desktop tray, and desk mic)
RLN5393	High Power Control Station Kit (25-60 W) (includes power supply, desktop tray, and desk mic)

PUBLIC ADDRESS

RLN5288	Public Address Kit (includes switch box and cabling)
HKN9324_R	Speaker Cable for PA (15 ft)
HSN1000	External Speaker, 6 W for public address

CABLES

HKN9327	Igition Switch Cable
HKN4137	Low Power Cable to Battery (1-25 W)
HKN4191	High Power Cable to Battery (25-60 W)

PERIPHERALS

HLN3948	Basic RICK (Repeater Interface Comm Kit)
HLN3333	RICK (Repeater Interface Comm Kit)

DATA - CES

RDN7364	Base Modem
RDN7367	Mobile Display Terminal with GPS
RDN7368	Mobile Display Terminal
RDN7369	Stand Alone Modem with GPS
RDN7370	Interface Cable, 3 ft
RDN7376	Interface Cable, 15 ft
RDN7372	Fixed Mount GPS Active Antenna
RDN7373	Mobile Printer
RDN7374	Programming Software for CES Equipment
RDN7380	Mobile Programming Hardware
RDN7375	Magnetic Mount GPS Antenna
RDN7377	MAPS (US) Regional
RDN7378	AVL Messaging Statue Software
RDN7379	Credit Card Software
RDN7371	Credit Card Reader
RDN7738	Serial Breakout Unit (multiple modems)
RDN7739	Flying Lead Cable, 3 ft.
RDN7740	Flying Lead Cable, 15 ft.

Notes:

Turning the Radio On or Off

1. Rotate the **On/Off/Volume Control** knob clockwise. You will hear the self-test pass tone and see the green LED indicator light momentarily.
2. Rotate the **On/Off/Volume Control** knob counterclockwise until you hear a click and both the display and the LED indicators turn off.

Adjusting the Volume

1. Turn the On/Off/Volume Control knob clockwise to increase the volume, or counterclockwise to decrease the volume.

Selecting a Radio Channel

1. Press the ▲ or ▼ button to select the desired channel.

Sending a Call

1. Turn radio on and select appropriate channel.
2. Press **PTT** button, hold the microphone 1 to 2 inches (2.5 to 5 cm) from your mouth, and speak clearly into it.
3. Release **PTT** button to listen.

Receiving a Call

1. Turn radio on and adjust volume to the desired level.
2. Select desired channel.
3. To respond to an incoming call, press **PTT** button, hold the microphone 1 to 2 inches (2.5 to 5 cm) from your mouth, and speak clearly into it.

Starting or Stopping Scan

1. Press the preprogrammed **Scan** button to start scan. The green LED indictor blinks during scan operation. Or, select a channel that has been preprogrammed to start Auto Scan.
2. Press the **Scan** button again to stop scan. Or, select a channel that has not been preprogrammed to stop Auto Scan.

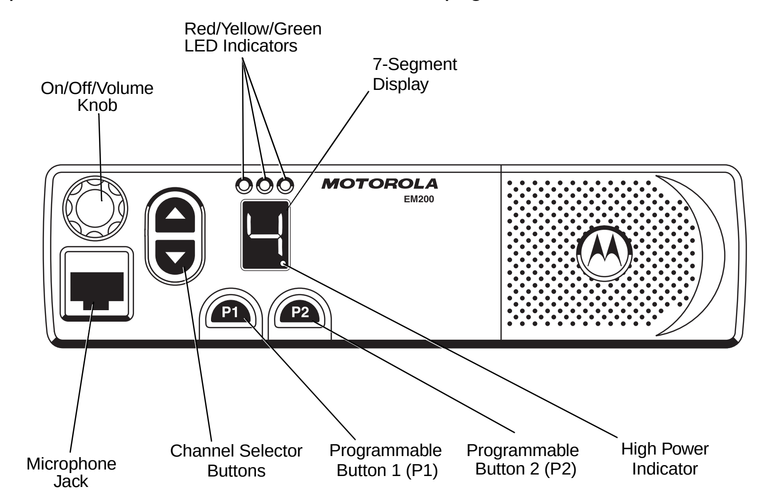
Deleting a Nuisance Channel During Scanning

1. While radio is on a nuisance channel, hold down preprogrammed **Nuisance Delete** button until you hear a tone.
2. Release **Nuisance Delete** button.



EM200™ Quick Reference Card

Record the functions for your radio's programmable buttons in the table provided below. For further information, see page 13 of this User Guide.



Button	Function	Short Press	Long Press	Hold Down	Page

LED Indicators

LED State/Color	Indication
Radio Call	
Red	Transmitting
Flashing Red	Receiving
Flashing Red	Channel Busy
Scan	
Flashing Green	Scanning for activity
Call Alert	
Flashing Yellow	Indicates receiving a Call Alert
Selective Call	
Flashing Yellow	Indicates receiving a Selective Call
Sticky Monitor/Open Squelch	
Yellow	While monitoring
High/Low Power	
Dot on Display	Indicates High Power
Dot Not On Display	Indicates Low Power

Audio Indicators for Programmable Buttons

Programmable Button	Positive Indicator Tone	Negative Indicator Tone
Scan	**Start** scan	**Stop** scan
Power Level	**High** power selected	**Low** power selected
Squelch	**Tight** Squelch	**Normal** Squelch
Repeater/ Talkaround	**Does not use** repeater	**Uses** repeater
VOX	VOX **enabled**	VOX **disabled**
Local/Distance	**Local** Mode	**Distance** Mode

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